



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,039	01/12/2001	Joseph Rinchiuso	CE08395R	1866
22917	7590	02/27/2007	EXAMINER	
MOTOROLA, INC.			HAILE, FEBEN	
1303 EAST ALGONQUIN ROAD				
IL01/3RD			ART UNIT	PAPER NUMBER
SCHAUMBURG, IL 60196			2616	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE		DELIVERY MODE
3 MONTHS		02/27/2007		ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/27/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com  
APT099@motorola.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/760,039	RINCHIUSO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Feben M. Haile	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 November 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.  
 4a) Of the above claim(s) 10-12 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-9 and 13-14 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

1. In view of applicant's Appeal Brief filed November 13, 2006, the status of the application is still pending with respect to claims 1-9 and 13-14.
2. The amendment filed is sufficient to overcome the rejection of claims 1-9 and 13-14 based upon the reference Koo et al. (US 6,804,219) failing to disclose each and every limitation of the claims, specifically the limitation delaying dropping the data channel for a time period based on the data rate. However, upon further consideration, a new ground(s) of rejection is made in view of Kim et al. (US 6,947,397).
3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 rejected under 35 U.S.C. 103(a) as being unpatentable over Koo et al. (US 6,804,219), hereinafter referred to as Koo, in view of Kim et al. (US 6,947,397), hereinafter referred to as Kim.

**Regarding claims 1 and 7,** Koo discloses transmitting data over a wireless data channel at a data rate (**figure 2 unit 200; column 2 line 38; in an active state, data is transmitted on a dedicated traffic channel at a rate**); determining that no more data needs to be transmitted (**column 2 lines 43-46; data transmission is discontinued**). Koo further discloses that if data transmission is discontinued for a predetermined time in the active state, the dedicated traffic channel is released and a control hold state is entered (**column 2 lines 43-46**).

However, Koo fails to explicitly suggest delaying dropping the data channel for a time period based on the data rate.

Kim teaches a CDMA communication system having a plurality of sending and receiving means that use a shared and dedicated channel (**column 3 lines 16-21**), in which a shared channel module calculates an idle allowable transmission rate about idle capacity utilization service sessions of the unit time based upon a control transmission rate value (**column 3 lines 37-41**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of calculating an idle allowable transmission rate taught by Kim into the state transition method disclosed by Koo. The motivation for such a modification is to efficiently utilize the idle capacity for data transmission even if the capacity allocated for data service is not being used when the amount of data is not known before the point of transmission.

**Regarding claim 2,** Koo discloses the step of transmitting data over the wireless data channel comprises the step of transmitting data over a Code Division Multiple

Art Unit: 2616

Access (CDMA) Supplemental Channel (**column 1 lines 49-54; communication between a base station and mobile station use dedicated channels such as a supplemental channel).**

Regarding claim 3, Koo discloses if data transmission is discontinued for a predetermined time in the active state, the dedicated traffic channel is released and a control hold state is entered (**column 2 lines 43-46**).

Koo fails to explicitly suggest wherein the step of delaying dropping the data channel for a time period based on the data rate comprises the step of delaying dropping the data channel for a time period, wherein the time period is proportional to the data rate.

Kim teaches a CDMA communication system having a plurality of sending and receiving means that use a shared and dedicated channel (**column 3 lines 16-21**), in which a shared channel module calculates an idle allowable transmission rate about idle capacity utilization service sessions of the unit time based upon a control transmission rate value (**column 3 lines 37-41**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of calculating an idle allowable transmission rate taught by Kim into the state transition method disclosed by Koo. The motivation for such a modification is to efficiently utilize the idle capacity for data transmission even if the capacity allocated for data service is not being used when the amount of data is not known before the point of transmission.

Regarding claim 4, Koo discloses operating a data transmitter in a CDMA Active state (**figure 2 unit 200; column 2 line 38; in an active state, data is transmitted on a dedicated traffic channel at a rate**; determining that no more data needs to be transmitted over a CDMA supplemental channel (**column 2 lines 43-46; data transmission is discontinued**); and operating the data transmitter in a Control-Hold state (**column 2 lines 43-46; the dedicated traffic channel is released and a control hold state is entered**). Koo further discloses that if data transmission is discontinued for a predetermined time in the active state, the dedicated traffic channel is released and a control hold state is entered (**column 2 lines 43-46**).

However, Koo fails to explicitly suggest prior to delaying transition to the Control Hold state for a period of time, wherein the period of time is based on a data rate.

Kim teaches a CDMA communication system having a plurality of sending and receiving means that use a shared and dedicated channel (**column 3 lines 16-21**), in which a shared channel module calculates an idle allowable transmission rate about idle capacity utilization service sessions of the unit time based upon a control transmission rate value (**column 3 lines 37-41**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of calculating an idle allowable transmission rate taught by Kim into the state transition method disclosed by Koo. The motivation for such a modification is to efficiently utilize the idle capacity for data transmission even if the capacity allocated for data service is not being used when the amount of data is not known before the point of transmission.

**Regarding claim 5**, Koo discloses wherein the step of operating the data transmitter in the CDMA Active state comprises the step of transmitting via a dedicated control channel and a CDMA supplemental channel (**column 1 lines 49-54; communication between a base station and mobile station use dedicated channels such as a dedicated control channel or a supplemental channel**).

**Regarding claim 6**, Koo discloses wherein the step of operating the data transmitter in the CDMA Control Hold state comprises the step of transmitting via a dedicated control channel only (**column 1 lines 49-54; communication between a base station and mobile station use dedicated channels such as a dedicated control channel**).

**Regarding claim 8**, Koo discloses if data transmission is discontinued for a predetermined time in the active state, the dedicated traffic channel is released and a control hold state is entered (**column 2 lines 43-46**).

Koo fails to explicitly suggest wherein the period of time is proportional to the data rate.

Kim teaches a CDMA communication system having a plurality of sending and receiving means that use a shared and dedicated channel (**column 3 lines 16-21**), in which a shared channel module calculates an idle allowable transmission rate about idle capacity utilization service sessions of the unit time based upon a control transmission rate value (**column 3 lines 37-41**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of calculating an idle allowable

transmission rate taught by Kim into the state transition method disclosed by Koo. The motivation for such a modification is to efficiently utilize the idle capacity for data transmission even if the capacity allocated for data service is not being used when the amount of data is not known before the point of transmission.

**Regarding claim 9**, Koo discloses wherein the channel circuitry comprises CDMA fundamental channel circuitry (**column 1 lines 49-54; communication between a base station and mobile station use dedicated channels such as a fundamental channel**).

5. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo et al. (US 6,804,219), hereinafter referred to as Koo, in view of in view of Kim et al. (US 6,947,397), hereinafter referred to as Kim, as applied to claims 1-9 above, and further in view of Lohtia et al. (US 2002/0082033), hereinafter referred to as Lohtia.

**Regarding claims 13-14**, Koo in view of Kim disclose the limitations of base claim 1 and 7.

Koo, Kim, and/or their combination fail to suggest establishing a temporary block flow (TBF) between a transmitting device and a receiving device to transmit data over the wireless data channel; and delaying termination of the TBF by transmitting dummy data over the wireless data channel

Lohtia discloses establishing a temporary block flow (TBF) between a mobile station and base station (**page 2 paragraph 0024**). Lohtia further teaches that the base

station and mobile station send messages to each other when the end of a TBF is detected before releasing the TBF (**page 3 paragraph 0029**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Koo and Kim to incorporate the method of delaying the release of a connection between two devices as taught by Lohtia. The motivation being enhancing performance of bursty packet based communications over a wireless network.

#### ***Response to Arguments***

6. Applicant's arguments filed November 13, 2006, with respect to the rejection(s) of claim(s) 1-9 and 13-14 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kim et al. (US 6,947,397).

#### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Feben M. Haile whose telephone number is (571) 272-3072. The examiner can normally be reached on 6:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wing Chan  
02/20/2007

  
WING CHAN  
SUPERVISORY PATENT EXAMINER